FIELD WORKSHEET #1 GENERAL FORESTRY INFORMATION

Lot #1 Total Acres: 200 Field Number(s): 1 Acres: 30 Date: 9/05/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age		s (feet) /Usable	Condition (Good, Fair, Poor)
Sugar Maple	P-20	Medium-Heavy	17	Multiple		75	36	Good
American Beech	P-22	Light	14	Multiple		65	20	Fair
Black Cherry	14-26	Light	14	Multiple		82	38	Good
White Ash	14-20	Light	9	Multiple		82	40	Good

^{* &}quot;S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions

Comments

This field represents a middle aged - mature Hardwood Forest dominated by Sugar Maple (Acer saccharum) that has seemingly been managed as part of the Erie County Sugar Bush.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems This field contains a southwesterly flowing intermittent stream that also crosses Field Numbers 2 and 3.

Fire Lane Status

The Fire Break is this field is approximately 15 feet wide, separates Field Numbers 1 and 3 and is in need of moderate clearing and widening as well as significant crown pruning.

^{**} Represents the most recent growth rings per inch from a core sample

FIELD WORKSHEET #2 ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium density and is characterized by the dominant species of Sugar Maple (Acer saccharum) along with less dominant hardwoods such as Black Cherry (Prunus serotina), White Ash (Fraxinus americana) and American Beech (Fagus grandifolia).

Subcanopy

The subcanopy is of medium density and is represented by Sugar Maple (Acer saccharum) and American Beech (Fagus grandifolia).

Shrub Layer

The shrub layer is of light density and includes Dogwoods (Cornus spp.) and Brambles (Rubus spp.).

Herbaceous Layer

The herbaceous layer is of medium density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia), Christmas fern (Polystichum acrostichoides), Silvery Spleenwort (Athyrium thelypteroides) Cinnamon fern (Osmunda cinnamomea), Spinulose Woodfern (Dryopteris spinulosa) and New York fern (Thelypteris noveboracensis). There also exists a variety of clubmosses including Tree Clubmoss (Lycopodium obscurum) and Staghorn Clubmoss (Lycopodium clavatum), herbaceous plants and a heavy density of seedling growth.

Successional Status

This field represents a middle aged - mature Hardwood Forest previously managed as a Sugar Bush and possessing a dense subcanopy of climax species. This system will continue to evolve into a mature Maple dominated Climax Forest.

Botanical Concerns - includes both invasive and protected species

Invasive: None

<u>Protected:</u> All ferns and clubmosses listed under "Herbaceous Layer" as well as Red Trillium (Trillium erectum).

FIELD WORKSHEET #1 GENERAL FORESTRY INFORMATION

Lot #1 Total Acres: 200 Field Number(s): 2 Acres: 30 Date: 8/05/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights Crown/l	,	Condition (Good, Fair, Poor)
Sugar Maple	P-36	Heavy	15	Multiple		85	42	Good
White Ash	P-24	Light	24	Multiple		72	40	Good
Black Cherry	P-14	Light	18	Multiple		85	24	Fair
American Beech	S/P	Light		Multiple				
Basswood	Р	Light		Multiple				
Hophornbeam	Р	Light		Multiple				

^{* &}quot;S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions

Comments

This field represents a mature Hardwood Forest dominated by Sugar Maple (Acer saccharum) that has seemingly been managed as part of the Erie County Sugar Bush.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems This field contains a southwesterly flowing intermittent stream that also crosses Field Numbers 1 and 3.

Fire Lane Status

The Fire Break in this field is approximately 20 feet wide and is in need of moderate clearing and widening as well as significant crown pruning. The two north-south Fire Breaks designated in the original Forestry Management Plan (1965) are no longer in existence.

^{**} Represents the most recent growth rings per inch from a core sample

FIELD WORKSHEET #2 ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium density and is characterized by the dominant species of Sugar Maple (Acer saccharum) along with less dominant hardwoods such as Black Cherry (Prunus serotina) and White Ash (Fraxinus americana).

Subcanopy

The subcanopy is of light density and is represented by Sugar Maple (Acer saccharum) and American Beech (Fagus grandifolia).

Shrub Layer

The shrub layer is of light density and includes Dogwoods (Cornus spp.) and Brambles (Rubus spp.).

Herbaceous Layer

The herbaceous layer is of heavy density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia), Christmas fern (Polystichum acrostichoides), New York fern (Thelypteris noveboracensis), Marsh fern (Thelypteris palustris) and Sensitive fern (Onoclea sensibilis). There also exists a variety of clubmosses including Tree Clubmoss (Lycopodium obscurum) and Staghorn Clubmoss (Lycopodium clavatum) and scattered herbaceous plants.

Successional Status

These fields represent a mature Hardwood Forest that has been previously managed as a Sugar Bush and will continue to evolve as a Maple dominated Climax Forest.

Botanical Concerns - includes both invasive and protected species

Invasive: None

<u>Protected:</u> All ferns and clubmosses listed under "Herbaceous Layer" with the exception of Sensitive fern (Onoclea sensibilis). Helleborine (Epipactis helleborine), a forest Orchid, is also protected.

FIELD WORKSHEET #1 GENERAL FORESTRY INFORMATION

Lot #1 Total Acres: 200 Field Number(s): 3 Acres: 50 Date: 8/05/03

Reported By: Earth Spirit Educational Services, Inc.

	DBH*	Density (Heavy,	Growth	Age Class		Heights	(feet)	Condition
Principal Species	(inches)	Medium, Light)	Rate**	(Even/Mult.)	Age	Crown/L	Jsable	(Good, Fair, Poor)
Red Maple	S-P	Heavy		Multiple		45	20	Poor
Scotch Pine	S/P	Medium		Even	33	35		Poor
Red Pine	S/P	Light		Even	33	35		Poor
Black Cherry	P-14	Light	17	Multiple		70	30	Fair
White Ash	P-14	Light	13	Multiple		64	20	Poor

^{* &}quot;S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions

Comments

This field represents an Old Field/Shrubland transitioning into a young Secondary Hardwood Forest. There also exists scattered wildlife plantings of various conifers. The Black Cherry (Prunus serotina) and White Ash (Fraxinus americana) are generally concentrated along the stream boundaries.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
This field contains a southwesterly flowing intermittent stream that also crosses Field Numbers 1 and 2.

Fire Lane Status

The Fire Break in this field is approximately 20 feet wide and is in need of moderate clearing, widening, mowing and significant crown pruning.

^{**} Represents the most recent growth rings per inch from a core sample

FIELD WORKSHEET #2 ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of light density and is characterized by the dominant species of Red Maple (Acer rubrum) along with White Ash (Fraxinus americana) and Black Cherry (Prunus serotina).

Subcanopy

The subcanopy is of light density and is represented by Sugar Maple (Acer saccharum) and American Beech (Fagus grandifolia).

Shrub Layer

The shrub layer is of light density and includes Dogwoods (Cornus spp.) and Brambles (Rubus spp.).

Herbaceous Layer

The herbaceous layer is of heavy density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia), Spinulose Woodfern (Dryopteris spinulosa), Sensitive fern (Onoclea sensibilis), Lady fern (Athyrium Filix-femina) and Interrupted fern (Osmunda claytoniana).

Successional Status

This field represents an Old Field/Shrubland transitioning into a young Secondary Hardwood Forest of Red Maple (Acer rubrum), White Ash (Fraxinus americana) and Black Cherry (Prunus serotina). In time, this system will gradually evolve into a Sugar Maple (Acer saccharum) dominated Climax Forest.

Botanical Concerns - includes both invasive and protected species

Invasive: None

<u>Protected:</u> All ferns listed under "Herbaceous Layer" except Sensitive fern (Onoclea sensibilis). Helleborine (Epipactis helleborine), a forest orchid and the clubmoss Ground Cedar (Lycopodium tristachyum) are also protected.

Lot 1—Fields 4, 5, 6 and 7

FIELD WORKSHEET #1 GENERAL FORESTRY INFORMATION

Lot # 1 Total Acres: 200 Field Number(s): 4,5,6,&7 Acres: 48 Date: 8/05/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable	Condition (Good, Fair, Poor)
Norway Spruce	10-16	Heavy	20	Even	76	78	Good
Red Pine	10-16	Medium	30	Even	76	78	Good
White Pine	10-14	Light	24	Even	76	78	Fair
Black Cherry	12-16	Light		Multiple			
Sugar Maple	S/P	Light		Multiple			
White Ash	12-16	Light		Multiple			

^{* &}quot;S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions

Comments

These fields represent Conifer Plantations of Norway Spruce (Picea abies), Red Pine (Pinus resinosa) and White Pine (Pinus strobus). Hardwood intrusions presently exist in all levels of the Conifer Forests.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems These fields contain Dresser Creek, a major four season stream of the area.

Fire Lane Status

The Fire Breaks in these fields are approximately 20-25 feet wide and are in need of significant edge and crown pruning.

^{**} Represents the most recent growth rings per inch from a core sample

Lot 1—Fields 4, 5, 6 and 7

FIELD WORKSHEET #2 ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium - heavy density and is characterized by mature conifers such as Norway Spruce (Picea abies), Red Pine (Pinus resinosa) and White Pine (Pinus strobus) along with some mature hardwoods represented by Black Cherry (Prunus serotina) and White Ash (Fraxinus americana).

Subcanopy

The subcanopy is of light density and is represented primarily by Sugar Maple (Acer saccharum) and White Ash (Fraxinus americana).

Shrub Layer

The shrub layer is of very light density and includes Dogwoods (Cornus spp.) and Brambles (Rubus spp.).

Herbaceous Layer

The herbaceous layer is of light density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia), Spinulose Woodfern (Dryopteris spinulosa) and New York fern (Thelypteris noveboracensis).

Successional Status

These fields represent mature Conifer Plantations in the mid - late stages of hardwood succession.

Botanical Concerns - includes both invasive and protected species

<u>Invasive:</u> Tartarian Honeysuckle (Lonicera tartarica) <u>Protected:</u> All ferns listed under "Herbaceous Layer".

Lot 1—Fields 8, 9 and 11

FIELD WORKSHEET #1 GENERAL FORESTRY INFORMATION

Lot # 1 Total Acres: 200 Field Number(s): 8,9,11 Acres: 14 Date: 8/05/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable	Condition (Good, Fair, Poor)
Red Pine	10-15	Heavy	31	Even	76	78	Good
Sugar Maple	S/P	Heavy		Multiple			Poor
White Ash	S	Medium		Multiple			Poor
White Pine	10-18	Light	20	Even	76	70	Fair
Black Cherry	18-22	Light		Multiple		75 34	Good
American Beech	S	Light		Multiple			Poor

^{* &}quot;S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions

Comments

These fields represent mature Conifer Plantations dominated by Red Pine (Pinus resinosa) along with a significant intrusion of mixed hardwoods in all forest levels.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems None

Fire Lane Status

The Fire Breaks in these fields are approximately 20-25 feet wide and are in need of moderate clearing and edge/crown pruning.

^{**} Represents the most recent growth rings per inch from a core sample

Lot 1—Fields 8, 9 and 11

FIELD WORKSHEET #2 ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium density and is characterized by Red Pine (Pinus resinosa) and White Pine (Pinus strobus) along with a light intrusion of Black Cherry (Prunus serotina).

Subcanopy

The subcanopy is of heavy density and is represented primarily by Sugar Maple (Acer saccharum) along with other subdominant hardwoods.

Shrub Layer

The shrub layer is of light density and includes Dogwoods (Cornus spp.) and Brambles (Rubus spp.).

Herbaceous Layer

The herbaceous layer is of light density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia), New York fern (Thelypteris noveboracensis) and Hayscented fern (Dennstaedtia punctilobula).

Successional Status

These fields represent mature Conifer Plantations of Red Pine (Pinus resinosa) in the mid stages of hardwood succession. Sugar Maple (Acer saccharum), the dominant species of the subcanopy, will gradually out compete the conifers as these systems further evolve into a Hardwood Forest.

Botanical Concerns - includes both invasive and protected species

Invasive: None

<u>Protected:</u> All ferns listed under "Herbaceous Layer" except Hayscented fern (Dennstaedtia punctilobula).

FIELD WORKSHEET #1 GENERAL FORESTRY INFORMATION

Lot # 1 Total Acres: 200 Field Number(s): 10 Acres: 7 Date: 8/05/03

Reported By: Earth Spirit Educational Services, Inc.

	DBH*	Density (Heavy,	Growth	Age Class		Heights (feet)	Condition
Principal Species	(inches)	Medium, Light)	Rate**	(Even/Mult.)	Age	Crown/Usable	(Good, Fair, Poor)
Norway Spruce	10-18	Heavy	17	Even	76	78	Good

^{* &}quot;S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions

Comments

This field represents a mature Norway Spruce (Picea abies) Plantation generally absent of hardwood intrusion.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems None

Fire Lane Status

The primary Fire Break in this field is approximately 20 feet wide and is in need of moderate widening as well as edge/crown pruning while another north-south Fire Break borders an open field.

^{**} Represents the most recent growth rings per inch from a core sample

FIELD WORKSHEET #2 ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of heavy density and is dominated by Norway Spruce (Picea abies).

Subcanopy

The subcanopy is not present.

Shrub Layer

The shrub layer is not present.

Herbaceous Layer

The herbaceous layer is of light density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia) and New York fern (Thelypteris noveboracensis).

Successional Status

This field represents a Norway Spruce (Picea abies) Plantation whose dense canopy has restricted hardwood intrusion.

Botanical Concerns - includes both invasive and protected species

<u>Invasive:</u> None

Protected: All ferns listed under "Herbaceous Layer."

Lot 1—Fields 12 and 13

FIELD WORKSHEET #1 GENERAL FORESTRY INFORMATION

Lot #1 Total Acres: 200 Field Number(s): 12 & 13 Acres: 17 Date: 8/05/03

Reported By: Earth Spirit Educational Services, Inc.

	DBH*	Density (Heavy,	Growth	Age Class		Heights (feet)	Condition
Principal Species	(inches)	Medium, Light)	Rate**	(Even/Mult.)	Age	Crown/Usable	(Good, Fair, Poor)
(see below)							

^{* &}quot;S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions

Comments

These fields represent areas of well maintained mowed lawns.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems These fields contain Dresser Creek, a major southerly flowing four season stream.

Fire Lane Status

The Fire Breaks in these fields meander through open terrain and are in good condition.

^{**} Represents the most recent growth rings per inch from a core sample

Lot 1—Fields 12 and 13

FIELD WORKSHEET #2 ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is not present.

Subcanopy

The subcanopy is not present.

Shrub Layer

The shrub layer is not present.

Herbaceous Layer

The herbaceous layer is of heavy density and is dominated by a variety of field grasses and herbs.

Successional Status

These fields represent well maintained mowed lawns. As active management continues in these fields, shrub and tree species will remain restricted.

Botanical Concerns - includes both invasive and protected species

<u>Invasive:</u> None <u>Protected:</u> None

FIELD WORKSHEET #1 GENERAL FORESTRY INFORMATION

Lot #1 Total Acres: 200 Field Number(s): 14 Acres: 2 Date: 8/06/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights Crown/	` ,	Condition (Good, Fair, Poor)
Austrian Pine	P-12	Heavy	16	Even	38	58	3	Poor
Black Cherry	P-14	Light		Multiple		72	22	Poor
Sugar Maple	S/P	Light		Multiple				Poor
American Beech	Р	Light		Multiple				Poor

^{* &}quot;S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions

Comments

This field represents a middle aged Austrian Pine (Pinus nigra) Plantation that is generally overcrowded and is in the mid stages of hardwood succession.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems This field contains a southerly flowing intermittent stream.

Fire Lane Status

The Fire Break in this field is represented as a field border along Genesee Road.

^{**} Represents the most recent growth rings per inch from a core sample

FIELD WORKSHEET #2 ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium density and is characterized by Austrian Pine (Pinus nigra) along with a light intrusion of Black Cherry (Prunus serotina).

Subcanopy

The subcanopy is of medium density and is represented by a variety of hardwood species such as Sugar Maple (Acer saccharum) and American Beech (Fagus grandifolia).

Shrub Layer

The shrub layer is of light density and is dominated by Northern Arrowwood (Viburnum recognitum).

Herbaceous Layer

The herbaceous layer is of light density and is dominated by Tree Clubmoss (Lycopodium obscurum), Ground Cedar (Lycopodium tristachyum), Sensitive fern (Onoclea sensibilis) and Interrupted fern (Osmunda claytoniana) along with a variety of herbs.

Successional Status

This field represents a middle aged Austrian Pine (Pinus nigra) Plantation in the mid stages of transitioning into a Hardwood Forest.

Botanical Concerns - includes both invasive and protected species

Invasive: None

<u>Protected:</u> All ferns and clubmosses listed under "Herbaceous Layer" except for Sensitive fern (Onoclea sensibilis).

Lot 1 Summary and Recommendations

FIELD WORKSHEET #3 WILDLIFE SUMMARY

Lot # 1 offers an excellent variety of habitats for diverse populations of wildlife species. Field Numbers 1 and 2 represent middle aged and mature Hardwood Forests. Field Number 3 includes an extensive Old Field/Shrubland transitioning into a young forest. Field Numbers 4-11 and 14 all represent Conifer Plantations in various stages of hardwood intrusion and Field Numbers 12 and 13 are managed as mowed lawns. In addition to these varied environments, Lot # 1 also contains several intermittent streams as well as Dresser Creek, a major four season stream.

During a period of two days (one of which included extensive rain), staff ecologists recorded a variety of wildlife observations based upon actual sightings and other wildlife "signs". The following list represents a brief overview of those encounters focused upon Mammals, Birds and Reptiles/Amphibians.

Mammals

Whitetail Deer (Odocoileus virginianus)
Gray Squirrel (Sciurus carolinensis)
Red Squirrel (Tamiasciurus hudsonicus)
Eastern Chipmunk (Tamias striatus)
Eastern Cottontail (Sylvilagus floridanus)
Red Fox (Vulpes fulva)
Raccoon (Procyon lotor)
Woodchuck (Marmota monax)
Coyote (Canis latrans)
Meadow Vole (Microtus pennsylvanicus)

Birds

Black-capped Chickadee (Parus atricapillus)
Pileated Woodpecker (Dryocopus pileatus)
Song Sparrow (Melospiza melodia)
Redtail Hawk (Buteo jamaicensis)
Blue Jay (Cyanocitta cristata)
Common Crow (Corvus brachyrhynchos)

Hermit Thrush (Catharus guttatus)
Broad-winged Hawk (Buteo platypterus)
Great Crested Flycatcher (Myiarchus crinitus)
Dark-eyed Junco (Junco hyemalis)
Hairy Woodpecker (Dendrocopos villosus)

Reptiles/Amphibians

Dusky Salamander (Desmognathus fuscus) Wood Frog (Rana sylvatica)
Red-spotted Newt (Notophthalmus viridescens)
Red-backed Salamander (Plethodon cinereus)

Wood Frog (Rana sylvatica)
American Toad (Bufo americanus)

FIELD WORKSHEET #4 RECOMMENDATIONS

The following recommendations for Lot #1 of the Erie County Forestry Management Plan are based upon field data collected by Earth Spirit Educational Services, Inc. in the areas of Forest Ecology, Wildlife Biology and general Ecology.

Field Number 1

<u>Description</u> - This field represents a middle aged - mature Hardwood Forest dominated by Sugar Maple (Acer saccharum) and managed as part of the Erie County Sugar Bush.

<u>Recommendations</u> - This field should be managed in order to maintain the integrity of the Sugar Bush. In this regard, subcanopy species should be thinned and selected hardwoods such as Black Cherry and White Ash should be harvested.

Field Number 2

<u>Description</u> - This field represents a mature Hardwood Forest dominated by Sugar Maple (Acer saccharum) and managed as part of the Erie County Sugar Bush.

Recommendations - see "Recommendation" for Field Number 1.

Field Number 3

<u>Description</u> - This field represents an Old Field/Shrubland transitioning into a young forest and also includes a moderately sized Conifer Plantation dominated by Scotch Pine (Pinus sylvestris).

<u>Recommendations</u> - This field should remain without treatment in order to enhance habitat diversity, control soil erosion and provide food and cover for wildlife.

Field Numbers 4 - 7

<u>Description</u> - These fields represent mature Conifer Plantations of Norway Spruce (Picea abies), Red Pine (Pinus resinosa) and White Pine (Pinus strobus).

Recommendations - These fields, as a result of hardwood intrusion and over competition, are experiencing slow growth and general decline. It is recommended then, that these Plantations be actively managed, especially those fields that border and shade out the two major Maple Sugaring trunk lines. These areas, in particular, should be cleared significantly (50 feet on both sides of the trunk lines) in order to enhance the production of the Sugar Bush. Field Number 6 however, due to its steep topography, should remain without treatment in order to control soil erosion and protect the watershed (Dresser Creek).

Field Numbers 8, 9 & 11

<u>Description</u> - These fields represent mature Conifer Plantations in the mid stages of hardwood succession.

<u>Recommendations</u> - These fields of mature Red Pine and White Pine Plantations currently serve as both important vegetative buffers for Genesee Road and significant environments for recreational use. As a result, these plantations should remain without treatment at this time.

Field Number 10

<u>Description</u> - This field represents a mature Norway Spruce (Picea abies) Plantation generally absent of hardwood intrusion.

Recommendations - This field of mature conifers should be actively managed.

Field Number 12 & 13

<u>Description</u> - These fields represent areas of well maintained mowed lawns.

<u>Recommendations</u> - These fields should be managed in their present state in order to preserve these areas for public use through potential recreational and/or educational activities.

Field Number 14

<u>Description</u> - This field represents a mature Austrian Pine (Pinus nigra) Plantation that is generally overcrowded.

<u>Recommendations</u> - This field should remain without treatment in order to allow this plantation to enhance habitat diversity, control soil erosion, provide food and cover for wildlife and act as a buffer along Genesee Road.

Lot 1 Soils, Waterways and Topography

Soils

Lot 1 contains predominately moderately well drained Mardin Channery Silt Loam soils (MdB, MdC and MdD), with 3-25% slopes, and moderate permeability above a fragipan at a depth of 16 to 50 inches. The steeper areas of these soils are highly erodible and the gentle sloping areas (MdB) are potentially highly erodible. A small rise of the somewhat poorly drained Volusia Channery Silt Loam (VpB), with 3-8% slopes and moderate permeability, bisects the Mardin soils. The southern portion of the lot contains linear areas of the well drained to poorly drained Fluvaquents and Udifluvents (Fu) soils, formed in recent stream deposits. These are hydric soils with variable permeability. A fan of Chenango Channery Silt Loam, Fan (ClB), with 3-8% slopes and moderate permeability, lies adjacent to the Fu soils. This highly erodible soil underlies the Forest's sugar house and sawmill.

Waterways and Topography

Dresser Creek flows through Lot 1 from the east toward the south border of the lot on Genesee Road and has formed a steep, forested gully, limiting forest maintenance on the steep slopes. An unnamed stream crosses the southwest corner of the lot, also flowing under Genesee Road. Generally, the lot slopes from north to south. Dresser Creek is a Class C stream, and a tributary of Cattaraugus Creek. Fish habitat in Cattaraugus Creek is stressed, primarily due to streambank erosion, with secondary pollutants of resource extraction, agriculture, road bank erosion and construction. Proper forest management practices should be utilized to prevent or minimize soil erosion and the introduction of sediment into streams and gullies.

Lot 1 Forest Stewardship Recommendations

Stand A (Fields 1, 2)

This is an uneven-aged stand of northern hardwoods containing mostly mature sugar maples, with a few white ash and black cherry. Some are part of the sugar bush. This stand should be thinned to a residual basal area of 70-80 square feet/acre which would maximize sap production and produce some sawlogs. Understory saplings of ironwood should be removed. Recheck in 10 years.

Stand B (Field 3)

This is an even-aged stand of large, pole-sized northern hardwoods, including clump red maples, white ash, black cherry, sugar maple and aspen. This pole stand is near the optimal size to thin, however the stand is currently adequately stocked. Since the diameter growth is about 2" in 15 years, recheck in 10 years.

Stand C (Fields 4 - 10)

These are mature conifer plantations including red, white and Scots pine, Norway spruce and larch with scattered hardwoods of cherry and ash. The mature pines, along with any hardwoods above 20" diameter or that are high risk, should be scheduled for harvesting to complete the transition to native hardwoods. Leave no-cut, buffer strips along creeks; especially wide on steep slopes.

Stand D (Fields 11, 14)

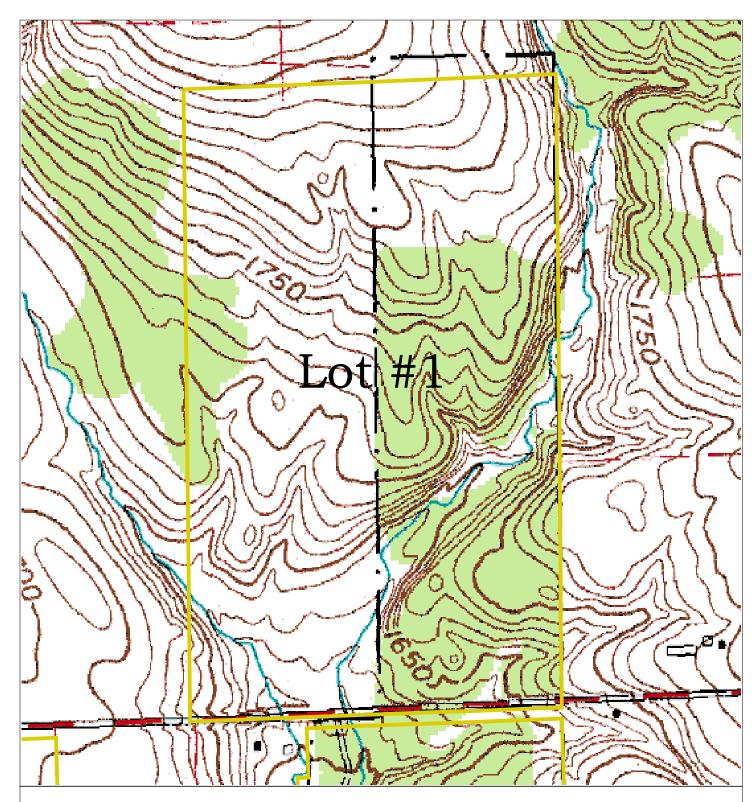
These are plantations of Austrian and red pine along the road with poor form on soils with poor internal drainage. Consider a low, non-commercial thinning to help develop the hardwood understory and to prevent overstory windthrow. Leave at least 100-200 feet of a no-cut buffer along the road. Recheck in 10 years.

Stand E (Fields 12, 13)

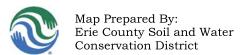
These are open fields with structures and parking lots. Continue current management.

General

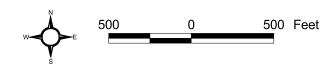
Best Management Practices (BMPs) for erosion control should be followed on the fire lanes used as vehicle and horse trails. Some erosion is occurring on the long slopes.

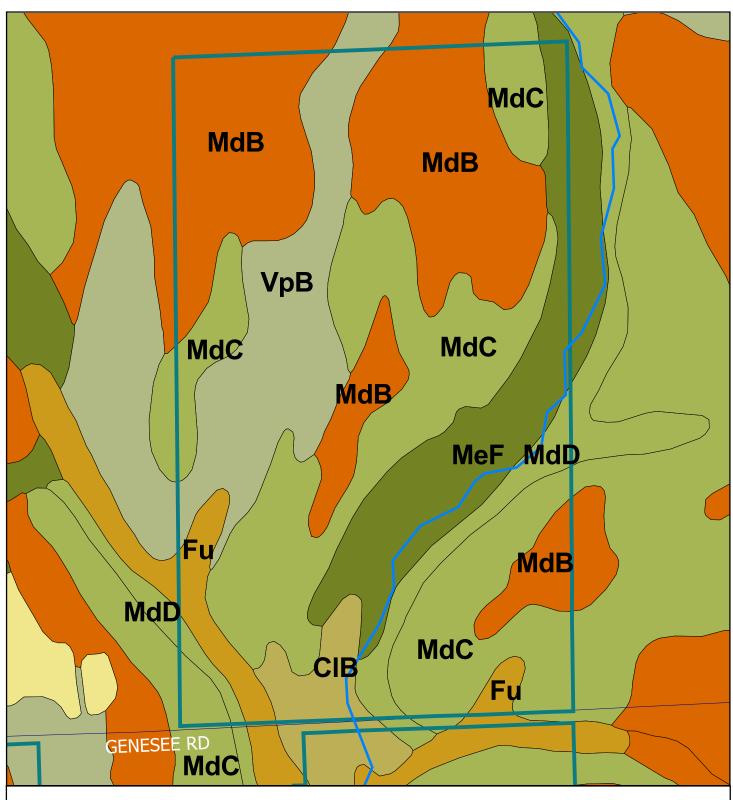


Erie County Forest Management Plan



USGS TOPOGRAPHIC QUADRANGLE

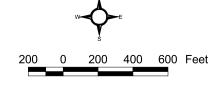




Erie County Forest Management Plan

Map Prepared By:
Erie County Soil and Water
Conservation District

LOT #1 - SOIL TYPES



Erie County Soil and Water Conservation District & USDA Natural Resources Conservation Service

Brief Soil Descriptions – Lot 1

For further information refer to the Soil Survey of Erie County, New York.

Symbol

Name / Description

CIB Chenango Channery Silt Loam, Fan, 3 to 8 Percent Slopes

Deep, nearly level to gently sloping, well-drained, low lime, channery silt loam soil formed in gravel and sand. The available water capacity is low. Permeability is moderate to rapid in the surface soil and subsoil and generally rapid or very rapid in the substratum. PRIME FARMLAND, POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIs, NYS SOIL GROUP-2b, K=.24, T=3

Fu Fluvaquents and Udifluvents, Frequently Flooded

Moderately deep to deep, nearly level, well drained to poorly drained, high to low lime, variable soils formed in recent stream deposits. The available water capacity and permeability are variable. No K or T values are assigned. HYDRIC SOIL, CAPABILITY CLASS-Vw, NYS SOIL GROUP-9

MdB Mardin Channery Silt Loam, 3 to 8 Percent Slopes

Deep, gently sloping, moderately well drained and well drained, low lime, channery silt loam soil formed in coarse loamy glacial till. It has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow in the fragipan and substratum. POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIW, NYS SOIL GROUP-4b, K=.24, T=3

MdC Mardin Channery Silt Loam, 8 to 15 Percent Slopes

Deep, sloping, moderately well drained and well drained, low lime, channery silt loam soil formed in coarse loamy glacial till. It has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow in the fragipan and substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIe, NYS SOIL GROUP-6b, K=.24, T=3

MdD Mardin Channery Silt Loam, 15 to 25 Percent Slopes

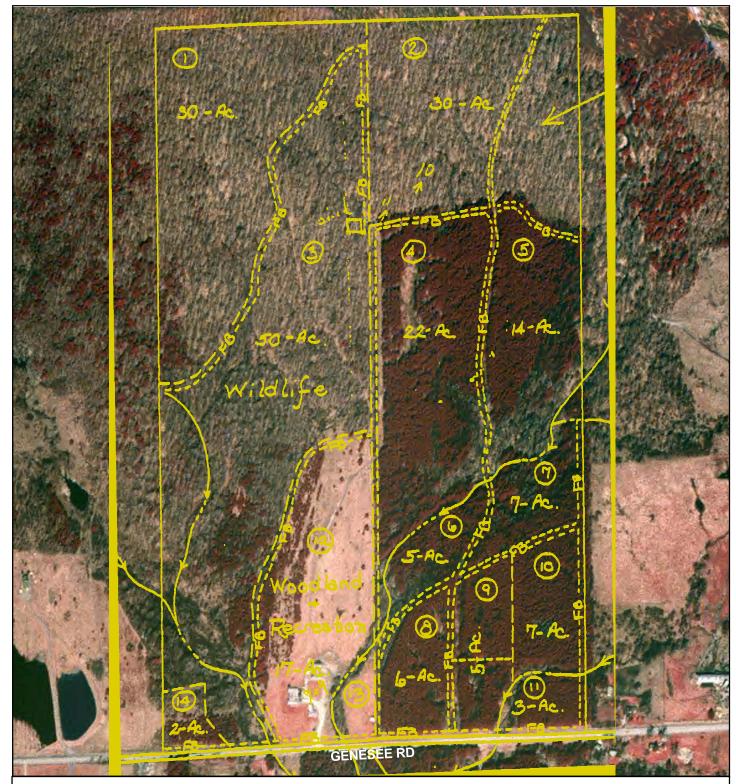
Deep, moderately steep, moderately well drained and well drained, low lime, channery silt loam soil formed in coarse loamy glacial till. It has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability is moderate above the fragipan and slow or very slow in the fragipan and substratum. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IVe, NYS SOIL GROUP-9b, K=.24, T=3

MeF Mardin-Valois Complex, 25 to 50 Percent Slopes

Deep, very steep, well-drained, low lime soil formed in coarse loamy glacial till. The Mardin soil has a very firm fragipan at a depth of 16 to 50 inches. The available water capacity is moderate. Permeability ranges from moderate to slow. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-VIIe, NYS SOIL GROUP-9b, K=.24, T=3

VpB Volusia Channery Silt Loam, 3 to 8 Percent Slopes

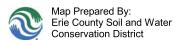
Deep, gently sloping, somewhat poorly drained, low lime, channery silt loam soil formed in fine loamy glacial till. It has a very firm fragipan at a depth of 15 to 50 inches. The available water capacity is moderate to low. Permeability is generally moderate above the fragipan and slow to very slow in the fragipan. POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIW, NYS SOIL GROUP-6b, K=.24, T=3

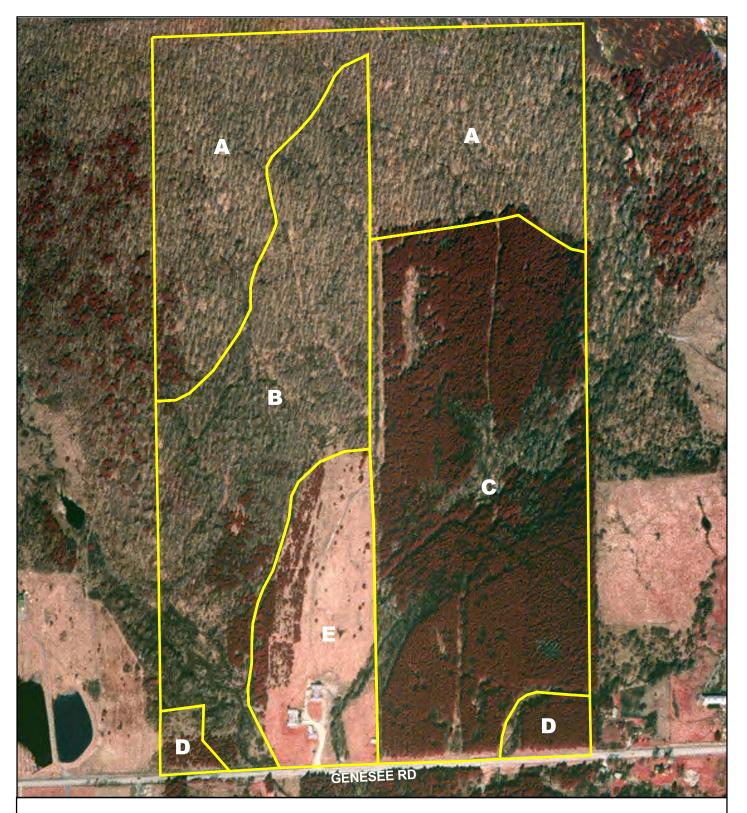


1965 CONSERVATION PLAN MAP

Erie County Forest Management Plan LOT #1





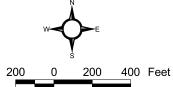


2003 STEWARDSHIP RECOMMENDATION MAP

Erie County Forest Management Plan

> Map Prepared By: Erie County Soil and Water Conservation District

LOT #1



* Basemap Source: 1995 Color IR Orthophotography